Application Serial No. 10/749,450 Filing Date: December 31, 2003

Docket No. 1332 Page 4 of 6

REMARKS

Prior to the present amendment, claims 1-6, 8-11 and 13-20 were pending. By this amendment, claims 1 and 2 have been amended, and claims 15-20 have been cancelled. Accordingly, claims 1-6, 8-11, and 13-14 are currently pending and under consideration.

Rejection under 35 U.S.C. 112, first paragraph

On page 2 of the office action, claims 1-6, 8-11 and 13-20 were rejected under 35 U.S.C. 112, first paragraph allegedly for lack of enablement. The examiner concedes that the specification is enabled for amines substituted by alkyl groups only or crown ethers and anions comprising sulfur or phosphorus.

Merely in order to expedite prosecution, applicants have amended the claims to the amines and anions that the examiner has conceded is enabled. Accordingly, the rejection is now moot and should be withdrawn.

Rejection under 35 U.S.C. 102(b) and 35 U.S.C. 103(a)

On page 3 of the office action, claims 1-5, 9, 13 and 15-20 were rejected under 35 U.S.C. 102(b) for allegedly being anticipated by Stockinger et al. (U.S. Patent No. 4,218,377). According to the examiner, Stockinger et al. discloses carboxylic acid metal salt/amine complexes which anticipates the claimed invention. On page 4 of the office action, claims 1-5, 9, 13 and 15-20 were rejected under 35 U.S.C. 103(a) allegedly for being obvious over Stockinger et al. (U.S. Patent No. 4,218,377). Applicants will address below the 102 and 103 rejections of the claims over Stockinger et al. together.

Applicants respectfully disagree that the claims are anticipated or obvious over Stockinger et al. The ionic liquid compounds of the claimed invention comprise (i) a Application Serial No. 10/749,450 Filing Date: December 31, 2003

Docket No. 1332

Page 5 of 6

cation and (ii) an anion. The <u>cation molecule component of the claimed invention is</u> comprised of a neutral ligand and a metal ion.

The metal salt/amine complexes disclosed in Stockinger et al. comprise two components. The first component is a cation/anion conjugate. The second components is a neutral ligand (i.e., polyoxyalkylene). See for instance, the metal salt/amine complexes shown in example 1, example 3, and example 4. Therefore, the cation of Stockinger et al.

is <u>not</u> comprised of a neutral ligand and a metal ion, as is required in the claimed

invention.

Furthermore, the metal salt/amine complexes disclosed in Stockinger et al. are not ionic liquids. It is well known to those of skill in the art that ionic liquids are liquids that contain essentially only ions (i.e., negatively and/or positively charged atoms or groups of atoms).

As stated above, the metal salt/amine complexes of Stockinger et al. contain (i) a cation/anion conjugate and (ii) a neutral ligand. Therefore, the complexes disclosed in Stockinger et al. do not contain essentially only ions since a neutral ligand is present along with the cation/anion conjugate. Thus, the metal salt/amine complexes of Stockinger et al. are not jonic liquid compounds.

Accordingly, applicants respectfully request that the rejection of the claims under 35 U.S.C. 102(b) and 103(a) over Stockinger et al. be reconsidered and withdrawn.

Support for claim amendments

Support for the metal ions in claims 1 and 9 can be found in the specification as originally filed, see *inter alia*, the page 2, paragraph [0016] of the preliminary amendment filed with the specification on December 31, 2003.

Application Serial No. 10/749,450 Filing Date: December 31, 2003 Docket No. 1332 Page 6 of 6

In view of the above, allowance of the pending claims is earnestly requested. If the examiner has any questions or concerns regarding this amendment, he is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Edna I. Gergel, Ph.D. Registration No. 50,819

Agent for Applicants

UT-Battelle, LLC P.O. Box 2008 Oak Ridge, TN 37831-6258 Tel. 865-574-0393 Fax 865-5740381